

DRAFT FOR DISCUSSION PURPOSES ONLY

April 17, 2015

Mr. Ravi Sanga
United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

**SUBJECT: PROPOSED DECONTAMINATION STANDARDS AND OBJECTIVES
JORGENSEN FORGE OUTFALL SITE
SEATTLE, WASHINGTON
CERCLA DOCKET NO. 10-2011-0017**

Dear Mr. Sanga,

On behalf of Jorgensen Forge Corporation (JFC) and The Boeing Company (Boeing), SoundEarth Strategies, Inc. (SoundEarth) has prepared this submittal for U.S. Environmental Protection Agency (EPA) review and comment on decontamination standards and objectives proposed for implementation at the Jorgensen Forge Outfall Site in Seattle, Washington (JFOS; Figures 1 and 2). Phased removal actions at JFOS have been proceeding to date under the *Second Modification to the Administrative Order on Consent for Removal Action (Order) at the Jorgensen Forge Outfall Site* (Second Modification; EPA 2013), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Docket No. 10-2011-0017, signed by JFC, Boeing, and the U.S. Environmental Protection Agency (EPA) on June 25, 2013 (EPA 2010). This submittal is supplemental to the following:

- JFC. 2015. *Supplemental Removal Action Cleanup Report, Jorgensen Forge Outfall Site, Seattle, Washington, CERCLA Docket No. 10-2011-0017*. October 3, 2014. Revised January 15.
- SoundEarth. 2014. *Memorandum: Sampling and Analysis Procedures for Sheetpile Residue, Jorgensen Forge Outfall Site, Seattle, Washington, CERCLA Docket No. 10-2011-0017*. August 7.

BACKGROUND

In September 2014, steel sheet pile (SSP) panels were extracted from the Duwamish Waterway and temporarily staged at JFOS for future re-use (JFC 2015). The original purpose of the SSP panels had been to form a cofferdam structure to maintain bank stability during implementation of the Jorgensen Forge Early Action Area (JFEAA) in-water removal action by Earle M. Jorgensen (EMJ) under CERCLA Docket No. 10-2013-0032. The SSP panels formed a cofferdam that allowed the targeted, in-water removal of polychlorinated biphenyl (PCB)-contaminated bank materials. The SSP panels that comprised the three in-water sides of the cofferdam were extracted, and the SSP panels that comprised the fourth side on the adjoining upland remain in place.

Currently, the extracted 60-foot-long SSP panels are staged in two, 3-foot wide stacks, on dunnage, secured on and under plastic sheeting and surrounded by wattles to prevent contact with the ground surface and control precipitation runoff (see Photograph 1). Two types of PCB-containing residues on the SSP panels have been confirmed: 1) a silty-sandy bank or backfill material that variably adhered to the former bottom ends of the panels (see Photograph 2), and 2) a black stain variably present

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approximately 2 to 5 feet below the former top ends (JFC 2015) on the interior side of the cofferdam sheets only (see Photograph 3). This section of the JFOS Work Plan proposes the standards and objectives for compliant decontamination of the SSP panels prior to reuse.



Photograph 1: Temporary staging and protection of materials and the ground surface, viewing east-southeast.



Photograph 2: Gray, sandy residue at former bottom ends (both sides).



Photograph 3: Black stain below former top ends (former interior side only).

PROPOSED DECONTAMINATION STANDARDS AND OBJECTIVES

JFC and Boeing understand that the SSP panels must be decontaminated consistent with 40 CFR 761.79 (Decontamination standards and procedures for PCBs) as a prerequisite for re-use. A secure, designated work zone will be established on the JFC Property for decontamination activities. Different decontamination standards will apply to the two conditions described above:

- Visual Standard No. 2 defined in §761.79(b)(3)(i)(B) will apply to the sandy material adhered to the former bottom ends of the SSP panels.
- The standard defined in §761.79(c)(2)(i) for moveable equipment (swabbing with solvent) will apply to the black stain areas near the former top inside ends of the SSP panels.

MANAGEMENT OF DECONTAMINATION ACTIVITIES

JFC and Boeing will actively manage JFOS material decontamination activities including specification of controls and procedures that minimize wastes, and containment and appropriate disposal of wastes generated during decontamination processes. JFC's and Boeing's required procedures for decontamination are included in Attachment A.

Sincerely,

Miles Dyer
Jorgensen Forge Corporation

William D. Ernst
The Boeing Company

Attachments: Figure 1 Physiographic Setting
 Figure 2 Property Features Map
 Appendix A Required Procedures for Decontamination

cc: Mr. Dave Bartus, EPA
Ms. Melissa Blankenship, EPA
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Mr. Tom Colligan, Floyd|Snider
Mr. Dan Balbiani, P.E., PES Environmental, Inc.
Ms. Deborah Gardner, SoundEarth Strategies, Inc.

DHG:

ATTACHMENT A

REQUIRED PROCEDURES FOR DECONTAMINATION

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ATTACHMENT A – REQUIRED PROCEDURES FOR DECONTAMINATION

JFC and Boeing are requiring the following procedures for decontamination of materials used in connection with Jorgensen Forge Outfall Site (JFOS) removal actions under CERCLA Docket No. 10-2011-0017. The required procedures include waste minimization and containment objectives, and documentation of compliance with 40 CFR 761.79 (Decontamination standards and procedures for PCBs). The procedures to be followed are for the following decontamination activities:

- Decontamination Standards
- Transportation and Staging of SSP Panels
- Designated Decontamination Work Zone
- Waste Minimization
- Waste Management and Disposal

Decontamination Standards

- Visual Standard No. 2 as defined in §761.79(b)(3)(i)(B) will apply to the sandy material adhered to the bottom ends of the SSP panels, and to equipment, materials and re-usable PPE such as boots, that come into contact with the sandy material.
- The standard defined in §761.79(c)(2)(i) for moveable equipment (swabbing with solvent) will apply to the black stain areas near the former top ends of the SSP panels.

Transportation and Staging of SSP Panels

A crane will be required to transport the SSP panels between the existing staging area inside the JFOS work area and the proposed staging area inside the designated Decontamination Work Zone.

- The ground surface of the transportation route will be covered with plastic sheeting to intercept any residues that may become dislodged during rigging and transport.
- The crane will transport the SSP panels to the Decontamination Work Zone above the protected transportation route, without contacting the ground surface or protective plastic sheeting, using rigging and guide ropes appropriate for the load.
- The SSP panels will be stacked on dunnage on and under plastic sheeting. Transport will be scheduled on a fair-weather day so that precipitation does not require collection or management.
- The Decontamination Work Zone will be formally secured with temporary fencing and signage to communicate work zone access and egress conditions.

Designated Decontamination Work Zone

A Decontamination Work Zone will be designated on JFC's Property inside the paved staging area within 200 feet of the current location of the SSP panels. The Decontamination Work Zone will encompass a decontamination cell, a Contamination Reduction Zone (CRZ), and two separate SSP panel staging areas for before and after decontamination.

- The Decontamination Work Zone and paved portions of the access route from the temporary staging area shall be street-swept prior to designating and securing the work zone, and the approximate corners of the work zone will be marked with utility locating paint on pavement prior to transporting the SSP panels.

- A decontamination cell shall be constructed inside the Decontamination Work Zone atop pavement located, to collect decontamination fluids as well as precipitation that falls during decontamination activities.
- The decontamination cell shall consist of a bermed perimeter lined with two sheets of heavy-duty geomembrane durable enough to withstand abrasive forces between the dunnage and the underlying concrete surface. The decontamination cell shall be longer and wider than one SSP panel (minimum 20 feet wide, 65 feet long, with a minimum 1-foot berm).
- A storage tank with capacity of at least 5,000 gallons (or the equivalent of up to six inches of liquid inside the minimum cell area, whichever is greater) will be maintained for storage of decontamination fluids and any incidental precipitation that lands inside the decontamination cell. Fluids will be transferred from the cell to the storage tank for profiling and disposal, using a trash pump, so that fluid levels inside the decontamination cell do not exceed 6 inches deep.
- A CRZ will be established next to the decontamination cell. Workers will access and egress the decontamination cell through the CRZ, where they will be able to decontaminate and/or remove personal protective equipment (PPE) and other equipment.
- Solid and liquid wastes will be segregated and separately contained to the extent practicable:
 - Solid wastes anticipated from the planned scope of decontamination activities include: solid residue vacuumed from the former bottom ends of the SSP panels; dunnage; PPE; slings, rigging, and guide ropes that contact the SSP panels; plastic sheeting; wire brushes and scraping tools, pump(s), hoses, and vacuum(s).
 - Liquid wastes anticipated from the planned scope of decontamination activities include: excess CAPSUR[®] solvent used to treat the interlock channels, decontamination water used inside the CRZ, and incidental precipitation that lands inside the decontamination cell.
- Separate staging areas will be established for stacking and protecting the SSP panels before and after decontamination. The staging area will be identical to the existing staging area, with SSP panels stacked on dunnage, on and under plastic sheeting, and wattles to control precipitation runoff.

Waste Minimization

In an effort to minimize waste volumes, decontamination of the SSP panels will proceed according to the following sequence:

1. Dunnage will be placed at intervals that do not come into contact with the black stain near the former top ends of the SSP panels and the sandy residue on the former bottom ends of the SSP panels.
2. Dunnage will be visually inspected and brushed as necessary whenever the SSP panels are flipped to ensure that any dislodged particles do not come into contact with a decontaminated side of an SSP panel.
3. The sandy residue will be scraped and vacuumed from the former bottom ends of the SSP (both sides).
4. The black stain near the former, top inside ends of the SSP will be swabbed using CAPSUR[®] solvent.
5. Excess solvent will be allowed to flow through the interlock channel down to the former bottom ends, where it will be collected and contained for disposal.
6. Any sandy residue remaining after the first step will be scraped and vacuumed a second time.